



# FLIPPED CLASSROOM- A NEW GENERATION CLASSROOM IN HIGHER EDUCATION

E. Selvabarathi<sup>1</sup> | Dr. K. Govindarajan<sup>2</sup>

<sup>1</sup> Ph.D Scholar, Department of Education, Alagappa University, Karaikudi.

<sup>2</sup> Assistant Professor, Department of Education, Alagappa University, Karaikudi.

## INTRODUCTION

Nowadays Higher Education is adopting new ways of teaching such as ways of Video-Based Learning (VBL) with the aim of moving away from the traditional classrooms. Video lectures have been growing in popularity and their use is increasing both inside and outside classrooms (Giannakos, 2013). "Many higher education institutions and educational technology companies are using them as a main of self-study medium or as tool to enhance the learning process" (Vieira, Lopes and Soares, 2014). Despite this, it is important to note that the mere use of videos in class is not by itself an improvement, since it is necessary to choose an appropriate instructional approach when designing VBL environments (Seidel, Blombergand Renkl, 2013). One of the latest methods that use video as a tool for learning is Flipped Classrooms – or inverted classrooms- and, in many cases, it is showed that the result of introducing videos in a learning design eventually converges in this type of methodology.

## FLIPPED CLASSROOM

The term flipped classroom has become a hot topic in higher education. Ideas about and opinions about flipped learning environments vary. Some consider it simply another way of talking about student-centered learning. Others view flipped classrooms as the most cutting-edge approach to learning. Still others see flipping as just another fad that will eventually run its course. The most widely used description of the flipped class is a learning environment in which the activities traditionally completed outside of class as homework are now completed in class during instruction time. And, the activities traditionally completed in class are now completed on students' own time before class. In many definitions and models, this means students watch a video of prerecorded lectures before class. Then, when they arrive to class, they work through assignments or activities with their peers and the instructor. While that is probably the most familiar idea of the flipped classroom, flipping can mean more than watching videos of lectures. After all, a video of a lecture is still a lecture. One of the essential goals of the flipped classroom is to move beyond the lecture as the primary way to deliver information and structure class time. A well-developed lecture can be effective, but instructors rely on it too heavily and often to the exclusion of other more meaningful teaching and learning strategies.

A flipped classroom allows instructors to introduce new ways of doing things. Yet adding something new generally requires letting go of something old. In the flipped classroom, instructors need to let go of their reliance on the lecture and focus on other ways to enhance learning by introducing active learning strategies that put students in the center of the learning experience. There are other ways to define the flip. It can be described as moving from an instructor-centered learning environment to a student-centered learning environment. It could also be defined as shifting from individual to collaborative strategies. Although, it is possible to flip a class using individual activities such as quizzes, worksheets, reflective writing prompts, and problem solving assignments. The key is to complete these activities during class time. Flipping may or may not include technology. Bergmann and Sams (2012) explain, "Ultimately, flipping a classroom involves shifting the energy away from the instructor and toward the students and then leveraging educational tools to enhance the learning environment." Keep in mind that educational tools include but are not limited to technology. While videos and other technological tools can be effective in a flipped classroom, they are not required. The true essence of the flip is really to focus on the student.

Bloom's Taxonomy provides the framework for comparing the lecture-centered class to the flipped class. Instructors focus on higher level learning outcomes during class time and lower level outcomes outside of class. This means the flip could be as simple as watching a video before class and then attending class for more in-depth discussions that involve judging, analyzing, and creating. If students work with the fundamental material before class, they are better prepared to apply the information and engage in higher level discussions with their peers and the instructor. Another way to think about the flipped classroom is to focus on involving students in the process of learning.

## DEFINING FLIPPED LEARNING

In the Flipped Learning model, teachers shift direct learning out of the large group learning space and move it into the individual learning space, with the help of one of several technologies. Teachers record and narrate screen casts of work they do on their computer desktops, create videos of themselves teaching, or curate video lessons from internet sites such as TED-Ed and Khan Academy.

Many educators start flipping their classroom by using these readily available materials. The videos or screencasts are available for students to access whenever and wherever it is convenient—at home, during study hall, on the bus, even in the hospital—as many times as they like, enabling them to come to class better prepared (Musallam, 2011).

Capitalizing on the students' preparation, teachers can devote more time to opportunities for integrating and applying their knowledge, via a variety of student-centered, active learning strategies such as conducting research or working on projects with classmates.

Teachers also can use class time to check on each student's understanding and, if necessary, help them develop procedural fluency. Teachers can provide individualized support as students work through the activities designed to help them master the material, meeting them at their readiness level.

Flipped Learning has been compared to online, blended, and distance learning because of the screencast or video components, but, there are clear differences. Online education, for example, occurs only remotely, and the teacher and student are never face-to-face (Oblinger & Oblinger, 2005).

Virtual class meetings, assignments, and lectures happen online through a course management website usually, but not always, asynchronously. Sometimes the lectures and other activities are augmented by group chats or other means of facilitating collaboration and peer instruction. Blended classes also have an online element, but that usually occurs during class time along with direct student-teacher contact (Allen, Seaman, & Garrett, 2007).

Students' experiences in face-to-face sessions vary, however, and are not necessarily different than what occurs in a traditional classroom. That is also the case in some flipped classrooms. The use of videos or other digital technologies to deliver content outside of class does not guarantee that anything different will occur during class time. However, due to the emphasis on students becoming the agents of their own learning rather than the object of instruction, the Flipped Learning model can enable educators to make the shift from teacher-driven instruction to student-centered learning.

Flipped classroom approaches are characterized by Following:

- A change in use of classroom time.
- A change in use of out-of-class time.
- Doing activities traditionally considered 'homework' in class.
- Doing activities traditionally considered as in-class work out-of-class.
- In-class activities that emphasize active learning; peer learning; problem solving.
- Pre-class activities.
- Post-class activities.
- Use of technology, especially video.

#### FOUR PILLARS OF FLIPPED LEARNING

Just as no two traditional classrooms are identical, such is the case with flipped classrooms. Because Flipped Learning focuses on meeting individual student learning needs as opposed to a set methodology with a clear set of rules, a cadre of experienced educators from the Flipped Learning Network, along with Pearson's School Achievement Services (2013), identified the key features, or pillars, of flipped classrooms that allow Flipped Learning to occur. The four Pillars of F-L-I-PTM are Flexible Environment, Learning Culture, Intentional Content, and Professional Educator.

#### FLIPPED LEARNING REQUIRES FLEXIBLE ENVIRONMENTS

Flipped classrooms allow for a variety of learning modes; educators often physically rearrange their learning space to accommodate the lesson or unit, which might involve group work, independent study, research, performance, and evaluation. They create Flexible Environments in which students choose when and where they learn. Flipped educators accept that the in-class time will be somewhat chaotic and noisy, as compared with the quiet typical of a well-behaved class during a lecture. Furthermore, educators who flip their classes are flexible in their expectations of student timelines for learning and how students are assessed. Educators build appropriate assessments systems that objectively measure understanding in a way that is meaningful for students and the teacher.

#### FLIPPED LEARNING REQUIRES A SHIFT IN LEARNING CULTURE

In the traditional teacher-centered model, the teacher is the main source of information, the teacher is the "sage on the stage" (King, 1993), i.e. the sole content expert who provides information to students, generally via direct instruction lecture. In the Flipped Learning model, there is a deliberate shift from a teacher-centered classroom to a student-centered approach, where in-class time is meant for exploring topics in greater depth and creating richer learning opportunities. Students move from being the product of teaching to the center of learning, where they are actively involved in knowledge formation through opportunities to participate in and evaluate their learning in a manner that is personally meaningful. Students can theoretically pace their learning by reviewing content outside the group learning space, and teachers can maximize the use of face-to-face classroom interactions to check for and ensure student understanding and synthesis of the material. Flipped educators help students explore topics in greater depth using student-centered pedagogies aimed at their readiness level or zone of proximal development, where they are challenged but not so much so that they are demoralized (Vygotsky, 1978).

#### FLIPPED LEARNING REQUIRES INTENTIONAL CONTENT

Flipped educators evaluate what content they need to teach directly, since lectures are an effective tool for teaching particular skills and concepts, and what materials students should be allowed to explore first on their own outside of the group learning space. They continually think about how they can use the Flipped Learning model to help students gain conceptual understanding, as well as procedural fluency. Educators use Intentional Content to maximize classroom time in order to adopt various methods of instruction such as active learning strategies, peer instruction, problem-based learning, or mastery or Socratic methods, depending on grade level and subject matter. If they continue to teach using a teacher-centered approach, nothing will be gained.

#### FLIPPED LEARNING REQUIRES PROFESSIONAL EDUCATORS

Some critics of Flipped Learning have suggested that the instructional videos employed in the model will eventually replace educators. That is misguided. In the Flipped Learning model, skilled, Professional Educators are more important than ever, and often more demanding, than in a traditional one. They must determine when and how to shift direct instruction from the group to the individual learning space, and how to maximize the face-to-face time between teachers and students. Gojak (2012) noted that the right question for educators to ask themselves is not whether to adopt the Flipped Learning model, but instead, how they can utilize the affordances of the model to help students gain conceptual understanding, as well as procedural fluency when needed. During class time, educators continually observe their students, provide them with feedback relevant in the moment, and continuously assess their work. Professional Educators are reflective in their practice, connect with each other to improve their trade, accept constructive criticism, and tolerate controlled classroom chaos. While Professional Educators remain very important, they take on less visibly prominent roles in the flipped classroom.

#### BENEFITS OF FLIPPED CLASSROOM

The flipped classroom encompasses some approaches, including active and collaborative learning, problem-based learning and project-based learning. Some of the benefits of the flipped classroom are given below:

- Learning at their own place.
- Engage concepts with peers.
- Particular benefit to those students whose personality types and preferred learning styles impair their performance in traditional educational environment.
- It increase team work skills, and enhance mutual understanding and trust.

- The teacher can spend class time working one-to-one with the student who requires extra help.
- Teachers work closely with students in the classroom.
- Improve student attitudes.
- Teachers can group students together.
- Improve students' ability to solve open-ended problems.
- Builds stronger student/teacher relationships.
- Lessons are delivered to students even if they are absent due to illness, holidays, etc.
- Increased classroom time to present content, discuss complex topics and work with students either individually or in small groups.
- Reduced time spent answering basic and repetitive questions due to students' ability to review lectures online.
- The ability to use recorded lectures in multiple course sections year over year, with easy tools for updating content; and quick adaptation of lecture content to respond to new learning needs.

#### CHALLENGES IN FLIPPED CLASSROOM

There are also some challenges in to flipped class room. There are given below:

- Students spend all of their homework time in front of a computer.
- Students in poor areas may not have the ability to possess the computers and the internet that the flipped classroom requires.
- Difficult to self-learning and understand.
- Lack of student motivation.
- Such independent learning still needs to be guided and supported. Appropriate training and ongoing support is still needed for both students and teachers.
- Finding the best infrastructures.
- Prevent the disclosing of the learner information via network.
- Could require additional learning curve for non-technical learners.
- Can create a feeling of isolation, separation or of being out-of-the-loop.

#### CONCLUSION

The flipped classroom is a strategic direction that helps higher education meet the expectations of today's students while optimizing teaching and classroom resources. The blended learning approach of the flipped classroom can be leveraged for both individual courses and on an organizational level to improve instructional delivery and enhance student achievement and satisfaction. Michael Gorman (2012) observed that any learner-centered educator would provide activities in the classroom that are action based, authentic, connected and collaborative, innovative, high level, engaging, experience based, project based, inquiry based, and self-actualizing. Gojak (2012) noted that the right question is not whether or not to flip your classroom, instead, professional educators ought to ask how they can use the affordances of this model to become more effective as teachers and increase students' conceptual understanding, as well as procedural fluency (where necessary). The Flipped Learning model provides that bridge to a learner-centered classroom environment, thereby enabling deeper learning (Bergmann & Sams, 2012) that educators are seeking.

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